Kuwait University
College of Business Administration
Quantitative Methods &
Information Systems

Course Syllabus
Fall 2023
Mohammad AlMarzouq
ISOM 230: Business Problem Solving & Programming

Instructor: Dr. Mohammad Al-Marzouq

Times: Section 2: 11:00-11:50 pm Sun, Tue, Thu

Location: D2-1021

Grades: https://moodle.ku.edu.kw

Office hours: Monday to Wednesday: 10:30 pm to 11:00 pm (in office or via Teams)
Or by appointment

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Email: mo.almarzouq@ku.edu.kw

Syllabus: http://bit.ly/mis230_syl

Website: TBA

Final: 03/01/2024 11:00 - 13:00

Assistant: Eng Hessa AlHumaidan

Tutorial: Lab 1: Sunday 5-7pm

Office hours: Sunday: 1:00 PM - 3:00 PM
Monday: 12:30 PM - 3:30 PM
Tuesday: 9:00 AM - 11:00 AM
Wednesday: 12:30 PM - 3:30 PM

Course Description

The purpose of this course is to introduce students to fundamental concepts and models of application development and help them understand the key processes related to building functioning applications and appreciate the complexity of application development. Students will also learn the basic concepts of program design, data structures, programming, problem solving, programming logic, and fundamental design techniques for simple business applications. Moreover, students will comprehend and practice the program development life cycle, including gathering requirements, designing a solution, implementing a solution in a programming language, and testing the completed application.

Course Learning Outcomes

Upon successful completion of the course, students will be able to:

CLO1. Use primitive data types and data structures offered by the development environment

CLO2. Analyze problems and choose an appropriate data structure for modeling a simple problem.

CLO3. Write simple applications that relate to a specific business domain .

CLO4. Design, implement, test, and debug a program that uses each of the following fundamental programming constructs: basic computation, simple I/O, standard conditional and iterative structures, and the definition of functions.

CLO5. Use appropriate tools to deliver and evaluate basic technical documents, presentations, and group interactions.

CLO Mapping to CBA Skill Based Competency Goals[1]

	Competency Goal			
CLO	Analytical	Communication	Information Technology	Business Ethics
1				
2	I			
3	I			
4	I			
5		A		

Type of Emphases:

- **(I)ntroduce:** Students will be introduced to the skill and their grasp of it assessed in the course.\
- **(A)pply:** The course will not cover the skill. Students should have a high-level grasp of the skill and are required to apply it in the course.
- **(R)einforce:** Students should have an introductory-level grasp of the skill and the course will improve their mastery to a higher level.

[1] Undergraduate program competency goals shown at the end of this document.

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Textbook

- Course website
- Tony Gaddis (2021), Starting out with Python, 5th edition. Purchase online.

Prerequisite

- ISOM 130

Lab Requirements

- 1 Hour (No credit)

Recommended Readings

- Allen B. Downey (2015), Think Python, 2nd Edition. https://greenteapress.com/wp/think-python-2e/
- Al Sweigart (2020) Automate the Boring Stuff with Python, 2nd Edition. https://automatetheboringstuff.com

Additional material

This class is supported by DataCamp, the most intuitive learning platform for data science and analytics. Learn any time, anywhere and become an expert in R, Python, SQL, and more. DataCamp's learn-by-doing methodology combines short expert videos and hands-on-the-keyboard exercises to help learners retain knowledge. DataCamp offers 325+ courses by expert instructors on topics such as importing data, data visualization, and machine learning. They're constantly expanding their curriculum to keep up with the latest technology trends and to provide the best learning experience for all skill levels. Join over 5 million learners around the world and close your skills gap.

Course Content Delivery Strategy

- Use of PowerPoint presentations
- Online content delivery through Teams
- Assignments and exercises through datacamp.com and repl.it

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Tentative Course Outline:

Week	Topics
1	Introduction to programming
2	Hello world
3	Input, Process, Output
4,5	Decision structures and boolean logic
6	Repetition structures
7	Functions
8,9	Files and Exceptions
10,11	Lists and Tuples
12	Strings
13,14	Dictionaries and Sets

Course Requirements and Policies

- The student is responsible for understanding class policies and keeping up to date with any changes made to them.
- Slack will be the main class communication tool, the student will be responsible to learn how to use it and to keep up to date with class announcements.
- Announcements, policy changes, assignments, and all communication posted on slack will be considered authoritative and treated as if the instructor mentioned it in class and as part of the course syllabus.
- To prevent class disruption, no entry is allowed after class attendance has been taken.
- Quizzes/exams will not be repeated for any reason.
- Negotiation of the final grade is neither accepted nor discussed.
- All mobile phones, communication, and electronic devices should be silenced.
- Food and drinks are allowed in class as long as they do not cause any disruption to class.
- Students are held to the highest standards of honor and conduct in class. As such, plagiarism and cheating will not be tolerated and will result in an automatic F for any student caught in such an act.
- Written assignments will not be accepted if not typed.
- Late assignments/submissions will not be accepted.

Class project: TBA

Participation: Attendance and participation in class discussions is expected from students, and will also be part of their assessment.

Attendance and Participation: Every student in this course must abide by the Kuwait University Policy on Attendance (published in the Student Guide, Chapter 3, Section 13). A copy of the student guide can be accessed online on:

http://www.kuniv.edu/cs/groups/ku/documents/ku_content/kuw055940.pdf

Cheating and Plagiarism: Every student in this course must abide by the Kuwait University Policy on Cheating and Plagiarism (published in the Student Guide, Chapter 3, Section 2). A copy of the student guide can be accessed online on:

http://www.kuniv.edu/cs/groups/ku/documents/ku_content/kuw055940.pdf

Please carefully note all sources and assistance when you turn in your work. Under no circumstances should you take credit for work that is not yours. You should neither receive nor give any unauthorized assistance on any deliverable. If you have any questions about what constitutes "unauthorized assistance" please email me before the deliverable is submitted.

Writing Style: Students must refer to APA writing style for their assignments and report writing. Refer to the English Language Center for help.
For sample and reference, please visit: https://owl.english.purdue.edu/owl/section/2/10/

Grading

The scores in this course will be the weighted average of the following items:

Weight	Description
30%	Quizzes (best 6 out of 8 - administered during lab sessions)
20%	Midterm (Written + practical/project)
10%	Tutorial
40%	Final (Written + Project)
100%	TOTAL

Grade Distribution

Grade	Range
A	≥ 95
A-	≥ 90 and < 95
B+	≥ 87 and < 90
B	≥ 83 and < 87
B-	≥ 80 and < 83
C+	≥ 77 and < 80
C	≥ 73 and < 77
C-	≥ 70 and < 73
D+	≥ 65 and < 70
D	≥ 60 and < 65
F	< 60

CBA Competency Goals

1. **Analytical Competency:** A CBA graduate will be able to use analytical skills to solve business problems and make a well-supported business decision.

Student Learning Objectives:

1.1. Use appropriate analytical techniques to solve a given business problem.
1.2. Critically evaluate multiple solutions to a business problem.
1.3. Make well-supported business decisions.

2. **Communication Competency:** A CBA graduate will be able to communicate effectively in a wide variety of business settings.

Student Learning Objectives:

2.1. Deliver clear, concise, and audience-centered presentations.
2.2. Write clear, concise, and audience-centered business documents.

3. **Information Technology Competency:** A CBA graduate will be able to utilize Information Technology for the completion of business tasks.

Student Learning Objectives:

3.1. Use data-processing tools to analyze or solve business problems.

4. **Ethical Competency:** A CBA graduate will be able to recognize ethical issues present in business environment, analyze the tradeoffs between different ethical perspectives, and make a well-supported ethical decision.

Student Learning Objectives:

4.1. Identify the ethical dimensions of a business decision.
4.2. Recognize and analyze the tradeoffs created by application of competing ethical perspectives.
4.3. Formulate and defend a well-supported recommendation for the resolution of an ethical issue.

5. **General Business Knowledge:** A CBA graduate will be able to demonstrate a basic understanding of the main business disciplines' concepts and theories.

Student Learning Objectives:

5.1. Acquire a fundamental understanding of knowledge from the main business disciplines (e.g. finance, accounting, marketing, and management information systems, among others).